

## FRANKLIN MAKES HISTORY

*On December 6, 2005, the Franklin Town Board became the first in the nation to pass a resolution establishing a Citizens' Commission on Peak Oil, in order to explore the needs and resources of the citizens of the Town of Franklin in the face of the global problem known as Peak Oil.*

### RESOLUTION :

*Whereas* oil production in the lower 48 states peaked in 1970, making the United States ever more dependent upon imported oil, and

*Whereas* a growing body of professional opinion in the energy industries believes that the world has already arrived or will soon arrive at the peak of global oil production, and

*Whereas* North American production of natural gas has already peaked, and

*Whereas* no alternatives are in place or ready to substitute for oil and natural gas and are decades away from being ready, and

*Whereas* the economic, political, and social implications of declining energy resources are not generally understood, and are likely to have dramatic effects upon every aspect of our lives, and

*Whereas*, in conditions of energy decline and reduced mobility, communities will be forced to rely ever more upon local resources,

### *Therefore,*

Be it resolved that the Franklin Town Board authorizes the creation of a Citizens' Commission to examine the issues raised by declining energy supplies and rising energy costs, to explore the needs and resources of the Town of Franklin affected by energy costs and supplies, and to report back to the Board and to the citizens of Franklin the results of its discussions and deliberations.

## Welcome to the New Franklin Register!

Several times a year, the NFR will bring you informed articles, interesting facts and local news updates relating to the depletion of fossil fuels and other complex energy issues now challenging our community.

***Please take home a copy. It's free!***

## RARE OIL

*A resource formation primer*

by Brian Brock

Crude oil and natural gas are stored solar energy. Plants, plankton, and some bacteria grow by using sunlight to build organic matter from water and carbon dioxide. Oil and gas form from accumulations of tiny organisms that grow floating in sea water, die, and then sink to the bottom. (Coal forms from accumulations of plant fragments in fresh water.) Considering the abundance of life that grows each year, you might think that during the 4,500 million years of Earth's history, limitless reserves of fossil fuels should have been produced. But unfortunately, because of all the unusual conditions that must

coincide to create a commercial oil field, this is not the case.

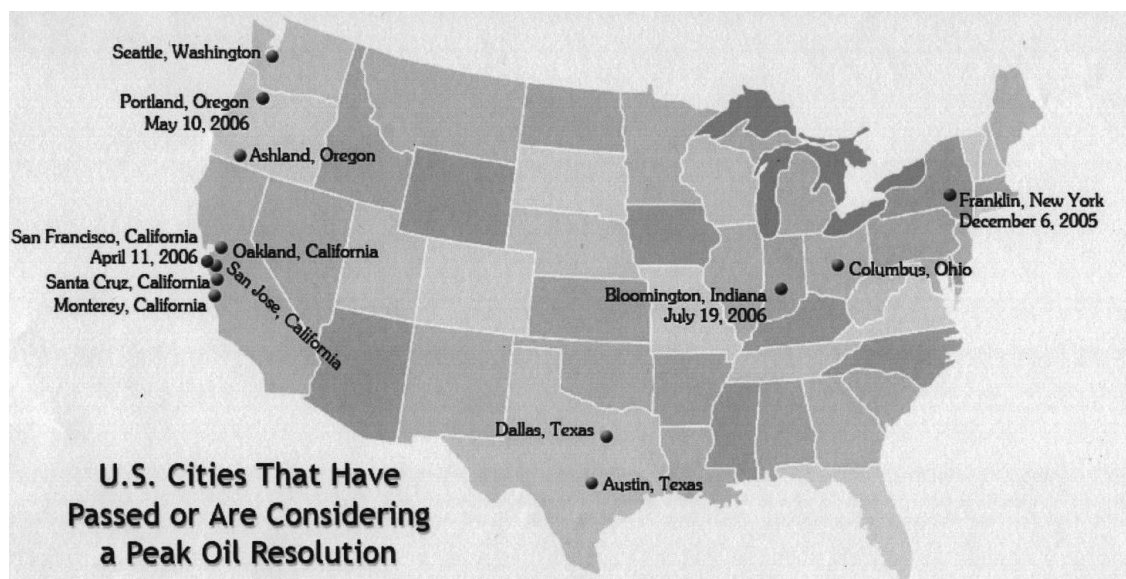
For instance:

\* Abundant life on our planet is a relatively recent evolution, starting 500 million years ago. More than half of our oil is from the middle era of fossilized life, the Mesozoic, roughly 65 to 250 million years ago.

\* Almost all organic matter is eaten by animals, fungi, or bacteria, which then absorb the energy produced as the hydrocarbons are broken down. Only a tiny fraction of this organic matter gets buried underground before it has been consumed.

\* Most rocks do not contain the organic matter needed to make oil. Shales do; they are thinly layered, very fine grained rock. Locally, the Catskills are made of coarser-grained conglomerate.

**See RARE on Page 2**



## PEAK OIL

*What does it mean, and what can we do?*

by Eugene Marner

All living things need energy to live. No one is closer to this simple fact than farmers and gardeners, even if we don't think about it every day as we go about our chores. We need energy to get up in the morning to do those chores. Our plants and animals need energy in order to grow and live. And it is the energy captured and concentrated by farmers and gardeners that sustains the vast majority of the population who do not grow their own food. All our techniques of planting and cultivation may be seen as strategies for harnessing and storing the energy of the sun, for our use and survival.

Until the last 200 years or so, the only energy we humans had was the sun. The marvel of photosynthesis converts the sun's energy into the plants that feed us or the animals that we eat, and that provide wood and fiber for clothing and shelter. As long as we use no more energy than the sun can replenish within the unfolding of the seasons, we are living in a sustainable manner.

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## A PEAK OIL GLOSSARY

### Hydrocarbons:

Chemical compounds, such as petroleum, coal and gas, that contain hydrogen and carbon.

### Fossil Fuels:

Hydrocarbons, such as petroleum, coal and gas, created from the remains of dead plants and animals deposited millions of years ago and subjected to tremendous heat and pressures in the depths of the Earth.

## JACK 2

*Reading Between the Lines on Big Oil's Gulf of Mexico Discovery*

by Brandon Dennis

I have studied Peak Oil, and followed world oil and gas production trends for the past two years. Most of what I have learned can be described as a progression of bad news events. You have all experienced it in a personal way through higher gasoline prices. World oil production has remained flat for the past eighteen months, while political turmoil in some of the more important oil producing regions seems to be getting worse.

The only recent good news in the oil business was the announcement early in September that Chevron, Statoil, and Devon Energy had made a major oil discovery in the deep waters of the Gulf of Mexico. Most news outlets in the U.S. proclaimed this discovery optimistically, reporting that the new field could contain from 3 to 15 billion barrels of oil. By choosing the high number of 15 billion barrels, some of those journalists were able to construct headlines that declared: "U.S. oil reserves increase by 50% due to Gulf of Mexico Discovery." As a result, the price of crude oil went down by 69 cents per barrel on the day the discovery was announced.

But let me share with you some of the facts of this discovery. A year ago, a production test well named Jack 2 was drilled 175 miles off shore in the Gulf of Mexico,

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## The New Franklin Register

Editorial board

Brian Brock  
Ellen Curtis  
Brandon Dennis  
Eugene Marner

George Schwinn  
Ellen Sokolow  
Gregory Williams

Marjorie B. Kellogg, editor

## What are we about?

The Town of Franklin Citizens' Commission on Peak Oil was authorized by the Resolution reproduced on Page One. Our purpose is to assess the needs and resources of the Town of Franklin in the face of Peak Oil, and to report back to the Town Board and to the people of Franklin.

We are a group of Franklin residents who meet on the fourth Thursday of every month, at a location determined at the previous meeting. Often, we meet at a member's house for a pot luck supper before we get down to actual business. All are welcome to join us, to ask questions and help us answer them, to share thoughts and ideas.

We have a number of projects that we hope to move from idea to action:

- **Local food production network**
- **Skills and services exchange**
- **Goods exchange**
- **Ride sharing bulletin board and/or website**
- **Farm to School Program for school lunches**
- **Community Greenhouses**
- **Community Energy Production**
- **Community Health Network**

In a nutshell, we are trying to imagine a more energy efficient habit of living, and more important, to develop ways to put it to work here in Franklin.

**Our next meeting will be Thursday, May 24th,  
at 7 p.m**

## We hope you will join us!

Or you can join our Peak Oil Awareness Yahoo Group. It's [POA\\_CNY@yahoo.com](mailto:POA_CNY@yahoo.com).

That is, Peak Oil Awareness\_Central New York.

This group fosters discussion of local efforts, potential or ongoing, to deal with the effects of Peak Oil on our communities.

## OPENING SOON...

### The Beehive!

*The NFR stopped by the old diner the other day to hear from new owners Gary and Scott what we might expect when this spruced up Franklin favorite reopens its doors.*

"Comfort. That's our main goal," Scott spread his arms in welcome. "Comfort and good food. We want everyone to feel completely at home here."

The menu will use local produce wherever possible, with daily specials taking advantage of what's best in season. "We'll be baking our own bread and pastries," Scott added. "And fresh, fresh meals, made from scratch in our totally renovated kitchen."

The Beehive will open at 6 A.M. to provide early birds with hearty, old-

*Announcing...a relocation landmark!*

### The new Franklin Farmers Market

Buy fresh produce from our local farms!

Sunday, July 1  
Sunday, August 5                      10 A.M. to 2 P.M.  
Sunday, September 2

On the lawn of Franklin Stage Company's Chapel Hall  
School Street, Franklin, NY

To participate as a vendor, contact Ellen Curtis: 607-829-5631  
Sponsored by the Greater Franklin Chamber of Commerce  
and

The Franklin Improvement Society

fashioned breakfast fare. At lunch, served until 2 P.M., a range of salads will join the familiar burgers and sandwiches. The happiest innovation is dinner, which will be served from 5 P.M. until 9:30 P.M. The restaurant will be open every day except Monday.

Scott explained the choice of name: "The old Beehive was on the corner, where the Quickway is now. They tore it down after the 1950's. It was

a famous and infamous place - it had its good days and bad days, but it was central to village life at the time." He gives credit to Linda at the Franklin Free Library for her help in researching the history of The Beehive's older incarnation.

And he says, "We want to recreate The Beehive in its very best sense: a comfortable gathering place for the entire village and the surrounding area."

## THE UPSIDE OF \$100 A BARREL OIL!

By Jim Mullen

Woo-woo! No more waiting at the pump!

What rush hour?

High speed trains not just for France anymore

All those horse-drawn Hummers

Pick up an abandoned second home for pennies

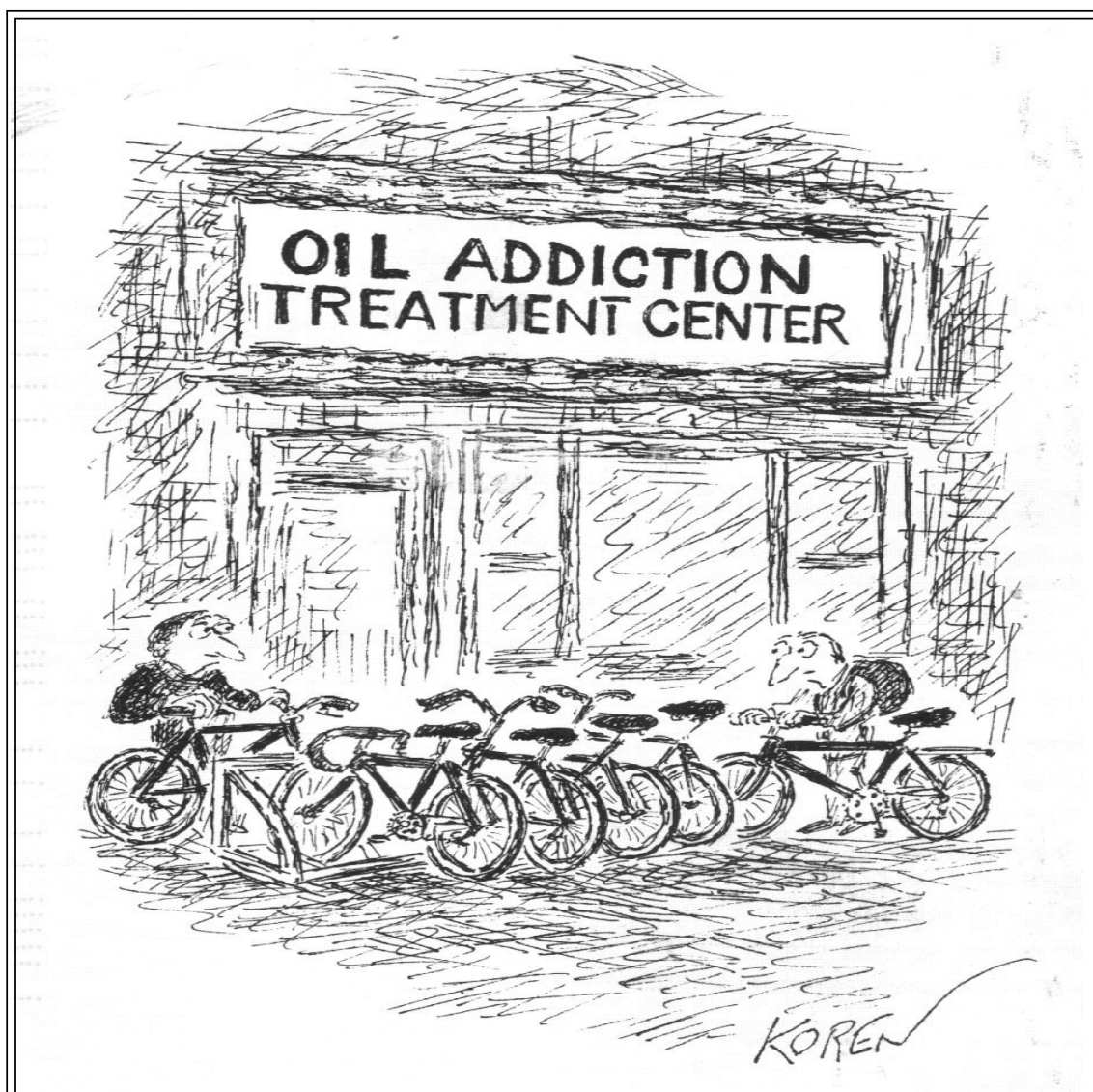
Parking at the mall just got really easy

Men buy bright red hybrids during their mid-life crisis

Riding bikes and walking to work solves obesity crisis

Nice Vespa, dude!

Exxon makes a profit cleaning up its own oil spills



## RARE -

(continued from Page 1)

erates, sandstones, and siltstones. The closest thickness of shales is exposed north of Oneonta and south of the Mohawk River. Even many shales do not contain abundant organic matter. Oil shales do.

\* Oil is formed from only the fatty portions of cells, about 5 to 15 % of their total matter. The rest, mostly proteins and carbohydrates, is too fragile and quickly degrades.

\* Conditions for converting organic matter into oil are restrictive. Once the matter is buried, it gets "cooked" by the greater pressure and temperature underground. To make oil, rocks need to be heated to between 120 and 350 degrees Fahrenheit. This is called the 'oil window.' (Such temperatures are typically found 2 to 3 miles underground.) Where temperatures are too low, the organic matter remains as kerogen, a waxy substance that stays locked in the shale. Where temperatures rise too high, oil breaks down to natural gas (methane) or, above 500 degrees Fahrenheit, completely back to water and carbon dioxide. By the time sedimentary rocks have been converted to metamorphic rocks, all oil and gas has been lost.

\* The natural process of making oil takes time. Little oil is being recovered from rocks younger than 5 million years old.

\* Because shale contains only traces of oil, there must be vast and thick volumes of this source rock for an oil field to form. Big shale deposits are found in deep sedimentary basins.

\* Currently, there is no economical way to extract oil directly from source rocks. Therefore, a porous and permeable layer (or 'reservoir rock') must exist above the source rock. Most sedimentary source rocks deep underground are saturated with water. Over millions of years, oil (being lighter than

water) will float up into the reservoir rock. Gas, being lighter than oil, can accumulate above the oil.

\* Oil and gas will rise all the way to the surface and be lost unless there is a third and impermeable layer (or 'cap rock') above the reservoir rock. This will keep the oil from escaping.

\* If the reservoir rock and cap rock are lying flat, as they were when they were laid down, the oil will form only a thin layer. Therefore, a further underground structure is needed, such as a fold, dome, or fault, which will lift part of the reservoir rock higher than the rest, and concentrate the oil and gas in that area.

\* The surface of the earth is ever changing, at least on the time scale of millions of years. As rocks rise above sea level, they are eroded away, and any fossil fuels they may carry are destroyed. The rock of mountain ranges is so deformed that any oil there has been lost, although oil is frequently found in the foothills of mountain ranges. As a result, most of the crude oil that has been produced during the entire history of the earth has been lost even before we try to recover it.

\* Oil is recovered from rocks that were deposited in relatively shallow water on the continents, either in former inland seas or on the margins of continents. But over half of the earth's surface is ocean floor, miles deep.

Our economy runs on oil, which is becoming hard to find. Despite our understanding of how oil forms and therefore where to look for it, there is only a finite supply to recover. It was laid down over hundreds of millions of years, and yet it has taken us only a century or so to drain those reservoirs. Since oil was first drilled in the 19<sup>th</sup> century, we have been able to increase world oil production to meet a rising demand. But now, world production has peaked, or soon will. Oil production in the United States peaked in the early 1970s and today, we import twice as much oil as we produce. Setting up current estimates of oil reserves against the amount of oil that can be pumped and how fast we are burning it, tells us that all the oil will be gone in less than 50 years. (We burn 85% of the oil, the rest going into plastic, fertilizers, solvents, etc.) Of course, more oil will be discovered, but at ever decreasing volumes. Only rising prices will curb our appetite for oil and bring supply and demand back into balance.

## JACK - continued from Page 1

southwest of New Orleans. This exploratory well set new world records by starting 7,000 feet below the ocean surface, and then drilling another 21,175 feet beneath the sea floor. Jack 2 was flow-tested for a month at 6,000 barrels per day. This deep-water oil comes from an area approximately 80 feet wide and 300 feet long. Geologically, it is contained in a sandstone reservoir rock known as the Lower Tertiary Wilcox.

The truth, at this early stage, is that nobody really knows what oil reserves exist in the Lower Tertiary Wilcox sandstone. The Jack 2 exploratory well penetrated a small field of buried oil which is one of many that comprise the entire Lower Tertiary region. The quality of oil and the permeability of this reservoir rock has been found to be extremely variable. The 3 to 15 billion barrel number that the press has seized upon is the product of mere speculation about the potential of a larger region that extends well beyond the area for which the Jack 2 test well provided information. This wider region must be thoroughly explored and flow-tested before these reserve projections have any real meaning.

It's been disturbing to witness the exaggerations that the main stream media were willing to commit, in order to hype this oil discovery. Basically, the U.S. media conglomerates found a small crumb of good news and served it up on a silver platter as if it was chocolate cake with a cherry on top. Far more important in energy news this year were the announcements that the world's second and third largest oil fields have peaked. These two fields - the Burgin in Kuwait and the Cantarell in Mexico - each produced over 2 million barrels per day in their glory. Now, both have started their long journey into terminal decline. Yet this monumental event in oil production history did not receive a fraction of the coverage that was given to Chevron's Jack 2 discovery.

And there is another vital piece of the puzzle that the media decided not to remind us of. That high end estimate of 15 billion barrels, along with the claim of a potential 50% increase in total U.S. oil reserves, all sounds great until you realize that Americans consume 7.7 billion barrels of oil each year. Suppose these journalist's wildest dreams come true, and the Gulf of Mexico's deep water Lower Tertiary region does in fact yield 15 billion barrels of oil down the line. To claim a 50% increase in current U.S. reserves suggests that those reserves now stand at 30 billion barrels. In fact, they are estimated at a little less than 29 billion barrels. A little basic math tells us that without the Jack 2 discovery, the U.S. has only four years worth of oil remaining. Four years! And even if Jack 2 makes good on its highest-end estimates and our reserves are 50% greater, we won't be able to pump all that oil out of the ground within four, or six or eight years, because of geologic and production restraints. In truth, we will produce this oil in ever diminishing amounts and will be forced to import more and more each year, to cover our losses. Now, that's a news item and a half.

Can these numbers actually be true? Did the media not bother to perform this one very critical manipulation of figures for its readers? According to the U.S. Army Corps of Engineers, these reserve numbers and their relation to our high consumption rates are a dismal reality. In a report titled "Energy Trends and Implications for U.S. Army Installations," the Army Corps state that the "proved domestic reserve lifetime for oil is about 3.4 yrs."

I've learned some valuable lessons while watching the mainstream media spin the facts of Chevron's Jack 2 discovery the way that they did, and to the degree that they did. First, it taught me that the media are actively doing their part to make sure that the majority of Americans will be very surprised by the approaching unpleasant realities of oil and gas depletion. Secondly, I guess the CEO of Chevron, Dave O'Reilly, really meant what he said when he announced, "One thing is clear: the age of easy oil is over."

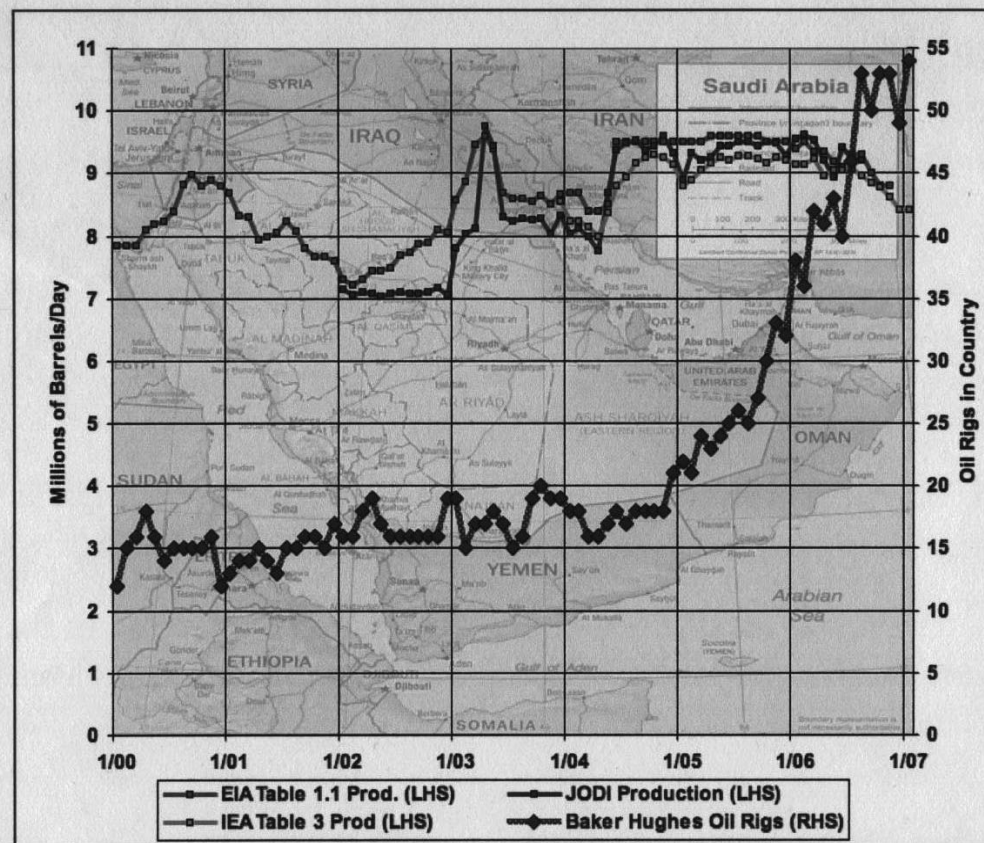
I suppose it is, when you are willing to spend 100 million dollars to drill a hole more than 5 miles deep beneath 7,000 feet of water, to pursue this ever diminishing prize.

## HUBBERT'S PEAK:

In the 1950's, geologist M.King Hubbert theorized that U.S. oil production would reach its maximum around 1970, and begin declining after that. He based his calculations on the amount of new oil being discovered over time. He was correct. U.S. oil production has fallen since 1970. Today's experts, using the same methods, feel that world oil production has already or will shortly peak, topping out at the current rate of about 84 million barrels a day.

## Saudi Arabia's Oil Production Has Been Falling for the Past 12 Months

This graph shows that Saudi Arabia's oil production has fallen a million barrels per day over the past year, while the number of drilling rigs in use there has increased by two and a half times over the same period.



Saudi Arabian oil production (left scale) and oil rigs in country (right scale), Jan 2000-Jan 2007. Click to enlarge. Source: US EIA International Petroleum Monthly Table 1.1, IEA Oil Market Report Table 3, and Joint Oil Data Initiative for oil supply. Baker Hughes for rig counts.

This is a very ominous trend, considering that Saudi Arabia is the most important oil producing nation and by far the world's largest exporter of petroleum. As such, the Saudis have been able to open the taps on a number of occasions to meet global emergency needs. All energy forecasters look to this nation to be the major contributor to future oil production growth, but most energy experts would agree that if Saudi Arabia has peaked in oil production, the world has peaked as well.

**PEAK OIL -**

(continued from Page 1)

But with the onset of the Industrial Revolution, we learned to use not only the seasonal energy of the sun, but also the sun's ancient energy, stored deep in the earth for hundreds of millions of years. First coal, then later oil and gas, provided a huge increase in the amount of energy available to each human being. For the first time in history, humans were freed from the constraints of the annual cycle of plant growth and energy conversion. Quickly we became dependent upon a vast range of mechanical slaves. With the aid of fossil fuel resources, food production and population quickly grew far beyond what would be the capacity of the earth to sustain by its own annual cycles of growth and decay.

But lately, it has become clear just how finite these marvelous resources really are. The cheap and abundant sources of energy that sustain our civilization as we know it are about to peak in production and start a permanent and irreversible decline.

Oil does much of the work of our society; it eases our lives and feeds most of the world. Look around you! Pick up the object nearest to hand. Oil-burning engines probably brought it to you on a road made from asphalt (a petroleum product) or perhaps it was manufactured from oil (as are plastics, or paints, fibers and detergents). Oil almost certainly contributed to the power used in its manufacture

and, if it runs, it runs on power generated with fossil fuels. Our society and civilization are built upon the availability of cheap oil for transportation, for food production, for warmth, for trade and commerce.

The next decade or two will see the rapid unfolding of what will be the biggest event in modern history: the end of cheap, readily available oil. Yet, with the exception of a few responsible oil geologists and

**“Our society and civilization are built upon the availability of cheap oil.”**

scientists, almost no one is talking about this impending catastrophe. During the last presidential campaign, neither of the major candidates mentioned the swiftly approaching collapse and all it implies. Well, of course - no politician wants to be the bearer of bad news, and this news is dreadful. Many people will not believe it, and few wish to contemplate the appalling implications. I would rather not believe it, but it is a fact. The International Energy Agency, an organization of the industrialized countries and a clearing house of information on oil, has predicted that the peak of world oil production will come around 2012. Other oil analysts predict the peak much sooner, between now and 2010. It may have happened already.

The peak doesn't mean that the remaining oil will

suddenly dry up. Oil wells will go on producing oil for many decades. But after peak, the amount extracted from the earth will steadily decline. When that happens, everything that now depends on oil - food, jobs, heat, travel, hospitals, medicines, growth economies, television, movies, police and fire departments, armies, schools, roads, everything, you name it - will slowly and irreversibly begin to grind to a halt. Natural gas will be no substitute, as it is also being rapidly depleted. And none of the potential alternatives (such as solar power, wind power or the hydrogen economy) can replace oil *in the way that we now profligately use it*. The research so far suggests that many alternatives require more energy to produce than they will eventually generate. Those that do provide positive net energy cannot begin to approach either the power or the quantity of the oil we currently use. Once the oil is gone, nothing can perpetuate the present energy-intensive way of life that we have come to look upon as our birthright.

Some of us may not be around when the last drop is extracted, but our children will be. Unless we look closely and carefully at what is coming, we'll be unable to prepare for the survival of our children and grandchildren.

What can we do?

We must use the oil that is still available, and the short time we have with it, to create a new *low-energy* way of life. We must reshape our communities

and reorder our lives so that we work together to feed and house and clothe ourselves locally, without recourse to imports from distant places. By “distant places” I don't mean Paris and the Philippines but simply places that we cannot reach on foot, or bicycle or horse cart. It is not globalization that we need but localization, not growth but contraction.

We shall all need to grieve for the world that is passing; it is the only world we know. But tears will not save us nor will our armies (which will run out of gasoline shortly after we do). Nor will frenzied drilling for the last drop. The earth is a finite sphere and holds only so much stuff. Sooner or later - the evidence suggests sooner - the oil will run out. So we must overcome our grief, teach ourselves to value long-term survival above present comfort, and find the determination to organize for what, with much wisdom and care, could even turn out to be an improvement on our present way of living in the world and with each other.

What sorts of things can we do? We can start with food production. We are fortunate to live in an agricultural area where animal husbandry and the cultivation of crops are well understood by many and where gardening is common. Many people are still around who remember how to farm with horses and mules. Many know how to harvest crops by hand, how to store and preserve them. Make no

mistake: within a decade we'll need those skills. On a few acres, cooperating friends and neighbors can raise plenty of corn and potatoes and chickens to feed their families.

Then there is winter. We all have to learn to heat our homes without oil. Even in the cold northeast, passive solar homes require very little energy to heat. Information on how to use such techniques needs to be disseminated. We'll also have to ensure that our forests do not vanish in a panicky frenzy of clear-cutting for firewood.

There are many other things to consider: clothing, medical care, schools, the arts. We must begin to discuss what we can do and then organize to do it, for the changes we face are enormous and unprecedented and none of us can survive alone. This would be an excellent occasion to resuscitate service organizations like Masons, Elks, Moose, Rotary, etc. that have seen declining memberships over recent decades. Such groups can help provide the coordination and local support systems we shall need.

None of this will be easy, but we are not helpless and don't have to succumb to despair. We must come together in our communities and begin to talk about this colossal and inevitable event. Governments can't do it for us: they are short-sighted and unable to speak the truth. Corporations won't do it for us: they are interested only in maximizing profits. Nothing will happen if we don't do it for ourselves.

**IN FRANKLIN...  
JUNE**

- 2nd (Sat.) 9:00 to 4:00 Franklin Lawn Sales
- 6th (Wed.) 7:00 Elementary Spring Concert, Franklin Central School
- 7th (Thu.) 7:30 Franklin Planning Board, Town Garage
- 8th (Fri.) 1:30 to 6:30 ARC Blood Donation, Franklin Central School
- 11th (Mon.) 6:00 Franklin Improvement Society, Town Hall
- 12th (Tue.) 7:30 Franklin Town Board, Town Garage
- 14th (Thu.) 7:30 Treadwell Comm. Improvement Club, Kellogg School
- 15th (Fri.) 9:00 Stress Relief Clinic & Spinal Screening (J. Constable), NBDC
- 21st (Thu.) 6:00 Ouleout Valley Historical Association, Town Garage
- 22nd (Fri.) 7:00 Graduation, Franklin Central School
- 24th (Sun.) 8:00 Reading: Don't Come Again Soon (Jim Mullen) Franklin Stage Co.
- 26th (Tue.) 10:00 Great Highland Bagpiper, Franklin Free Library
- 27th (Wed.) 6:00 Franklin Chamber of Commerce, Dawn's Deli
- 28th (Thu.) 7:00 Franklin Citizen's Commission On Peak Oil

**JULY**

- 1st (Sun.) 10:00 to 2:00 Franklin Farmer's Market, Chapel Hall Lawn
- 3rd (Tue.) 10:00 Raptors, Hunters of the Sky, Franklin Free Library
- 5th (Thu.) 7:30 Franklin Planning Board, Town Garage
- 7th/8th (Sat/Sun) 10:00 Stagecoach Run Art Festival, Treadwell
- 9th (Mon.) 6:00 Franklin Improvement Society, Town Hall
- 10th (Tue.) 10:00 FOIBI African Drum and Dance, Franklin Free Library
- 10th (Tue.) 7:30 Franklin Town Board, Town Garage
- 17th (Tue.) 10:00 Magnificent Mysteries of Science, Franklin Free Library
- 18th (Wed.) 8:00 Premier: A Midsummer Night's Dream, Franklin Stage Company
- 19th (Thu.) 6:00 Ouleout Valley Historical Association, Town Garage
- 22nd (Sun.) 8:00 Reading: The End of It All (Cusi Cram), Franklin Stage Company
- 24th (Tue.) 10:00 Magic Garden Puppets, Franklin Free Library
- 25th (Wed.) 6:00 Franklin Chamber of Commerce, Dawn's Deli
- 26th (Thu.) 7:00 Franklin Citizen's Commission On Peak Oil
- 29th (Sun.) 8:00 Reading: untitled (Sylvia Sichel), Franklin Stage Company
- 31st (Tue.) 10:00 Sylvia Markson Ventriloquist, Franklin Free Library

**Relocalization:**

The average morsel of food we eat has travelled 1500 miles to reach our tables. Relocalization works to restore local production of food, energy and other necessary goods to offset the rising costs of importing them from around the globe.

**Peak Oil Reading****Books:**

- Richard Heinberg.....*The Party's Over  
Powerdown*
- James Howard Kunstler...*The Long Emergency*
- Walter Youngquist.....*Geodesinies*
- Kenneth Deffeyes.....*Hubbert's Peak*
- William Catton.....*Overshoot*

**Websites:**

- <http://www.energybulletin.net/index.php>
- <http://www.lifeaftertheoilcrash.net/Index.html>
- <http://www.theoilcrash.com/>
- <http://www.postcarbon.org/>
- <http://www.museletter.com>

(Richard Heinberg's website)